

Date: Sun, 19 Dec 93 13:01:38 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1481
To: Info-Hams

Info-Hams Digest Sun, 19 Dec 93 Volume 93 : Issue 1481

Today's Topics:

 ANS-351 BULLETINS
 Optimum call sign for CW/contests?
 Weekly Solar Terrestrial Forecast & Review for 17 December

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 19 Dec 93 19:18:22 GMT
From: news-mail-gateway@ucsd.edu
Subject: ANS-351 BULLETINS
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-351.01
PHASE-3D STATUS REPORT!

HR AMSAT NEWS SERVICE BULLETIN 351.01 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 18, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-351.01

The Phase 3-D Project Shifts Into High Gear

Following a series of meetings both in the United States and Germany
involving key members of the International Phase 3-D Project Development
Team, work on construction of the new amateur satellite is moving forward
at an accelerated pace.

On December 11th and 12th, Hanspeter Kulen, DK1YQ, along with Dr. Karl Meinzer, DJ4ZC, AMSAT-DL President and Phase 3-D Team Leader, hosted a key meeting of the project's international participants near Munich, Germany. AMSAT-NA's Vice President for Engineering, Dick Jansson, WD4FAB, and Dr. Tom Clark, W3IWI, AMSAT-NA's President Emeritus and a key member of the Phase 3-D GPS experiment group, were also in attendance. Both Dick and Tom report that all phases of the project are "on track" for the expected launch of Phase 3-D in 1996.

"Each country's team is performing their assigned tasks very well," said Jansson on Dec. 13th, soon after his return from Germany. Clark observed that, "we are really pulling together as an international group." He went on to note that, "thanks to the work of our European, South African and Japanese friends, it now looks like we'll have some superb cameras, some really 'hot' receivers and some very powerful transmitters on Phase 3-D when it's launched in 1996." Specifically, Dick mentioned that Mike Dorsett's (G6GEJ) effort's on the spacecraft's 2 Meter transmitter are right on schedule and that Mike's proposed construction approach has already met all the key design parameters.

During the Munich meeting, Jansson was presented with a token of appreciation by Dr. Karl Meinzer for his outstanding contributions to the project. Karl cited Dick's superb design work on the Phase 3-D structure and thermal control system as well as his tireless efforts in support of the overall international project.

Just prior to his meetings in Germany, Jansson met with both students and faculty members from AMSAT-NA's team at Weber State University in Ogden, Utah. Weber students are now in the process of building the flight model structure for Phase 3-D. Dick reports that this vitally important portion of AMSAT-NA's role in the overall effort is "also on schedule for delivery of flight hardware next June."

Other major contributions by AMSAT-NA to the project in the coming year will include the purchase of the spacecraft's heat pipes, solar panels and flight batteries, as well as final construction of the spacecraft's GPS positioning experiment, antennas and propellant flow hardware. In addition, yet another group of some 15 dedicated volunteers have now been assembled in the Orlando, Florida area. These people are already in the process of both securing and preparing the spacecraft's final integration facility. This team will also assist other project team members with integration activities beginning in mid-1994.

Jansson concluded by saying, "there is still a lot of work left on all of our plates between now and 1996." He also had high praise for the many volunteers now working on the project. "The ongoing work of our volunteers is of high quality, and is much appreciated. Without their selfless efforts, the Phase 3-D project simply would not happen." Jansson said.

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SB SAT @ AMSAT \$ANS-351.02
K0-25 EARTH IMAGING INFORMATION

HR AMSAT NEWS SERVICE BULLETIN 351.02 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 18, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-351.02

K6OYY Passes Along Some Information About KITSAT-OSCAR-25 (K0-25)

K6OYY has received an informative message from Mr. Hyungshin Kim of SaTReC/KAIST in Korea. Mr. Kim reports that the K0-25 images are not currently on K0-23, but that they will be available on K0-25 when its BBS is opened up sometime next year.

Currently images on K0-23 have the designation KAIWxxxx or KAINxxxx depending upon which imaging system was used; images from K0-25 will have KBIWxxxx or KBINxxxx as file designations.

In response to K6OYY's inquiry, Mr. Kim also indicated that it is possible for amateur experimenters to process the COLOR images from K0-25! He further stated that the designer of the K0-25 color CCD camera is preparing an article on how to do this.

K0-25 continues transmit strong signals with good modulation quality as received here by K6OYY at Santa Barbara, CA QTH. The Kitsat Team is very busy at the moment conducting experiments with the various systems on K0-25. Mr. Kim reports that one of his colleagues has been asked to prepare an article for the AMSAT publications.

[The AMSAT News Service (ANS) would like to thank Jim Shepherd (K6OYY) for the information which went into this bulletin item. For those on who live near the Santa Barbara, CA area, K6OYY is the 75M AMSAT West Coast HF Net Control Station. Listen for K6OYY on 3840 KHz every Tuesday night at 8:00 P.M. PST.]

/EX

SB SAT @ AMSAT \$ANS-351.03
MIR COSMONAUTS HEARD

HR AMSAT NEWS SERVICE BULLETIN 351.02 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 18, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-351.03

WA6ZVP Explains Working One Of the Russian Cosmonauts Aboard MIR

WA6ZVP noting one morning this past week that during a MIR pass on the west coast would provide him a good pass for a visual sighting. Getting up just as the spacecraft came above the horizon, he had noted again that the AOS time was about 3 minutes or so before it would pass out of the earth's shadow. With his receiver set to 145.550 MHz, he started to hear the normal packet traffic.

Just as WA6ZVP was about to go outside his house, he started hearing voice traffic but at first thought it was just some of the Los Angeles "locals" going QRMing the frequency and complaining about the packet traffic.

Much to his surprise, however, when WA6ZVP turned the volume up to hear the voice of a cosmonaut speaking broken but very understandable English. The cosmonaut was in a QS0 with another station which could not be heard locally or from a mountain top remote.

During the 5 or 6 minutes that I heard him, he did not identify so I don't know what call he is using. Presumably it was R0MIR. The best that WA6ZVP can recall, the cosmonauts have not been on voice for over 4-6 months.

For all those wishing to work R0MIR, please listen first before transmitting packet. As in the case of WA6ZVP, you might be surprised!

[The AMSAT News Service (ANS) would like to thank Roger Wiechman (WA6ZVP) for this bulletin.]

/EX

SB SAT @ AMSAT \$ANS-351.04
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 351.04 FROM AMSAT HQ
SILVER SPRING, MD DECEMBER 18, 1993
TO ALL RADIO AMATEURS BT
BID: \$ANS-351.04

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QS0, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
3-Jan-94	0200	B	160	WA5ZIB	N7NQM

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate NCS do not call on frequency, any participant is invited to act as the NCS.

Slow Scan Television on A0-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

/EX

SB SAT @ AMSAT \$ANS-351.05

WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 351.05 FROM AMSAT HQ

SILVER SPRING, MD DECEMBER 18, 1993

TO ALL RADIO AMATEURS BT

BID: \$ANS-351.05

Weekly OSCAR Status Reports: 18-DEC-93

A0-13: Current Transponder Operating Schedule:

L QST *** A0-13 TRANSPONDER SCHEDULE *** 1993 Nov 15-Jan 31

Mode-B : MA 0 to MA 95 ! / Eclipses, max

Mode-B : MA 95 to MA 180 ! OFF Dec 07 - 24. < duration 136

Mode-B : MA 180 to MA 218 ! \ minutes.

Mode-S : MA 218 to MA 220 !<- S beacon only

Mode-S : MA 220 to MA 230 !<- S transponder; B trsp. is OFF

Mode-BS : MA 230 to MA 256 ! Blon/Blat 240/-5

Omnis : MA 250 to MA 150 ! Move to attitude 180/0, Jan 31

[G3RUH/DB20S/VK5AGR]

F0-20: The following is the F0-20 operating schedule:

Analog mode: 15-Dec-93 07:41 -to- 22-Dec-93 8:05 UTC

Digital mode: otherwise noted above. [JJ1WTK]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you

provide will be of value to all OSCAR enthusiasts.

/EX

Date: Wed, 15 Dec 1993 22:12:46 GMT
From: munnari.oz.au!metro!basser.cs.su.oz.au!harbinger.cc.monash.edu.au!
yeshua.marcam.com!zip.eecs.umich.edu!destroyer!gatech!swrinde!sdd.hp.com!
col.hp.com!srigenprp!alanb@network.ucsd.edu
Subject: Optimum call sign for CW/contests?
To: info-hams@ucsd.edu

Robert Penneys (penneys@brahms.udel.edu) wrote:
: Now that the pick-your-own-callsign era may be at hand, there is a lot
: of furious thinking about what new ones would be best for various reasons.

: I am primarily interested in CW and contesting in both modes. I want to
: come up with some 3-land calls which might have the most impact.

For CW, pick the shortest possible call that ends with a dash (since dits
are more likely to get lost in the noise). Also it should not end with
a K or anything that sounds like a prosign. If I were still in 3-land,
I'd go for something like NE3T or NE3A.

AL N1AL

Date: Thu, 16 Dec 1993 17:38:59 MST
From: ucsnews!sol.ctr.columbia.edu!math.ohio-state.edu!cyber2.cyberstore.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Weekly Solar Terrestrial Forecast & Review for 17 December
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
December 17 to December 26, 1993

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE

	10.7 cm	HF Propagation +/- CON							SID	AU.BKSR DX							Mag	Aurora		
	SolrFlx	LO	MI	HI	PO	SWF	%MUF	%	ENH	LO	MI	HI	LO	MI	HI	%	K Ap	LO	MI	HI
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
17	087	G	G	P	P	05	-15	70	05	NA	NA	NA	02	10	25	25	4 12	NV	NV	MO
18	089	G	G	F	F	05	-10	70	05	NA	NA	NA	01	05	20	30	3 10	NV	NV	LO
19	090	G	G	P	P	05	-20	70	05	NA	NA	NA	02	15	35	25	4 22	NV	LO	MO
20	090	G	G	P	P	05	-15	70	05	NA	NA	NA	01	10	25	30	3 15	NV	NV	MO
21	090	G	G	F	F	10	-10	70	10	NA	NA	NA	01	05	15	30	2 12	NV	NV	LO
22	095	G	G	F	F	10	-05	70	10	NA	NA	NA	01	05	10	30	2 08	NV	NV	LO
23	095	G	G	F	F	10	-05	65	10	NA	NA	NA	01	05	10	30	2 08	NV	NV	LO
24	095	G	G	F	F	10	-05	65	10	NA	NA	NA	02	05	10	30	2 08	NV	NV	LO
25	095	G	G	F	F	10	-05	65	10	NA	NA	NA	02	05	10	30	2 08	NV	NV	LO
26	095	G	G	F	F	10	-05	65	10	NA	NA	NA	02	05	10	30	2 08	NV	NV	LO

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (17 DEC - 26 DEC)

EXTREMELY SEVERE																		HIGH
VERY SEVERE STORM																		HIGH
SEVERE STORM																		MODERATE
MAJOR STORM																		LOW - MOD.
MINOR STORM																		LOW
VERY ACTIVE	*			*														NONE
ACTIVE	***	*		***	**													NONE
UNSETTLED	***	***	***	***	**	**	**	**	**	**	**	**	**	**	**	**	**	NONE
QUIET	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	NONE

Geomagnetic Field	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun								Anomaly
Conditions	Given in 8-hour UT intervals																	Intensity

CONFIDENCE LEVEL: 70%

NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

77	J	
73	J	
69	J	
65	J	

62		J							
58		J							
54		J							
50		J					J		
46		J					J		
42		J					J		
39		M	J				M	J	
35		M	J				MM	J	
31		M	J				MM	J	
27		A M	JAA				MM	J	
23		A M	JAA				MM	J	
19		A M	JAA		A		AMM	J	
15		AAMA	JAAA		AA		AMM	AJ	
12		U AAMA	JAAAU		AA		AMM	AJ	
8		UUUAAMAU	U UJAAAUUU	UUUU	AAU		U U AMMUU	AJ	U U
4		QUQQUUUU	AAMAUQUUUQUJAAAUUUU	QQUUUUUQAAUQQQQQUQQUQ	AMMUUQAJQUUUUQQU				
0		QUQQUUUU	AAMAUQUUUQUJAAAUUUU	QQUUUUUQAAUQQQQQUQQUQ	AMMUUQAJQUUUUQQU				

Chart Start Date: Day #290

NOTES:

This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.

Q = Quiet, U = Unsettled, A = Active, M = Minor Storm, J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

110									
109						*			
108						*			
107						*		*	
106						*	*	*	
105						*	**	**	
104						*****	**		
103				*		*****	***		
102			*	*		*****	***		
101			*	**		*****			
100			*****	**		*****			
099			*****	***		*****			
098			*****	***		*****			
097		*	*****			*****			
096		***	*****			*****			


```

095 |      *          ****          *****          *****
094 |     **          *****          *****          *****
093 |     **          *****          *****          *****
092 |    *****    *    *****          *****          *****
091 |    *****          *****          *****          *****
090 | *   *****          *****          *****          *****
089 | * ***** *   *****          *****          *****
088 | * ***** *   *****          *****          *****
087 | *****          *****          *****          *****
086 | *****          *****          *****          *****
085 | *****          *****          *****          *****
084 | *****          *****          *****          *****

```

Chart Start: Day #290

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```

099 | -----
098 |                                     ***
097 |                                     *****
096 |                                     *****
095 | *****          *****          *****
094 | *****          *****          *****
093 | *****          *****          *****
092 | *****          *****          *****

```

Chart Start: Day #290

NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```

105 | -----
101 |                                     *
097 |      *          ** ** *
093 |      *          ** ** **

```


40%	**	*	**	*	*	*	*	*	*	*	40%										
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*								
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	-
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals											AURORAL BACKSCATTER									
-----	-----											-----									

MIDDLE LATITUDES

FORECAST Given in 8 hour local time intervals											SWF/SID ENHANCEMENT										
CONFIDENCE Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun											F S S M T W T F S S										
----- --- --- --- --- --- --- --- --- --- ---											- - - - - - - - - - -										
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%					*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%										
60%	***	***	***	***	***	***	***	***	***	***	60%										
80%											80%										
100%											100%										
=====	==	==	==	==	==	==	==	==	==	==		-----									
100%											100%										
80%											80%										
60%											60%										
40%	*	*	*	*	*	**	**	**	**	**	40%										
20%	***	***	***	***	***	***	***	***	***	***	20%										
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	-
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals											AURORAL BACKSCATTER									

LOW LATITUDES

[illegible]

[illegible]

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (17 DEC - 26 DEC)

High Latitude Locations

CONFIDENCE LEVEL ----- 65%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE	*	***	*								
	LOW	***	***	***	***	***	***	***	**	**	*	*
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Middle Latitude Locations

CONFIDENCE LEVEL ----- 70%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE											
	LOW		*									
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Low Latitude Locations

[illegible]

